



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,110	12/26/2001	David R. Davis	450.232US2	1032

7590

07/01/2003

Schwegman, Lundberg, Woessner & Kluth, P.A.
P.O. Box 2938
Minneapolis, MN 55402

EXAMINER

CHANG, YEAN HSI

ART UNIT

PAPER NUMBER

2835

DATE MAILED: 07/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/034,110

Applicant(s)

DAVIS ET AL.

Examiner

Yean-Hsi Chang

Art Unit

2835

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,32-34 and 36-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,32-34 and 36-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 28 April 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3-6, 32-34 and 36-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Behl (US 6,185,097 B1).

Behl teaches a cooling assembly comprising:

- A passage (case of one of 30s, fig. 2) (claims 1 and 34)
- A first fan (one of 30s, fig. 2) (claims 1 and 34)
- An isolation assembly (16, fig. 6) for generally enclosing heat generated from a first component (one of the 14s, figs. 1 and 6), being removably attachable to a computer case (10, fig. 1) without opening the computer case, and being separate from another heat-sensitive component (another 14, fig. 1) (claims 1 and 34)
- An alternate passage (case of another 30, fig. 2) configured to provide an air flow path to the isolation assembly (claims 1, 3, 34 and 36)

Art Unit: 2835

- A second fan (another 30, fig. 2) suitable for passing air through the alternate passage (claims 1 and 34)
- A passive heat sink (18, fig. 1) operatively coupled to the first component (claims 4, 32, 37 and 40)
- Wherein a plurality of components (fig. 6) are enclosed in a case, and air is drawn from outside (22, fig. 1) (claims 5-6 and 38-39)
- Wherein the isolation assembly is configured to shield the first component from an amount of EMI (28 is part of the assembly; also see col. 3, lines 6-13) (claims 33 and 41)
- An exhaust hole (on a rear wall of 10, not numbered, fig. 1) in communication with the passage and suitable for venting air through the computer case (claims 44 and 48)
- An air path (shown in fig. 1, not numbered) from the first fan through the exhaust hole passes through the passage (claims 45 and 49)
- Wherein the cooling assembly is configured such that substantially all of the air passing through the first fan is vented through the exhaust hole (shown in fig. 1) (claims 46-47 and 50-51)

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2835

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Behl in view of Papa et al. (US 6,175,490 B1).

Behl discloses the claimed invention except the first component comprising a processor.

Papa teaches a processor (200, fig. 2) enclosed in an isolation assembly (103, fig. 3A; see also col. 4, lines 16-22).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the isolation assembly of Behl with the isolation assembly taught by Papa et al. such that the heat generated by the processor could be effectively handled by the cooling assembly, since processors are heat-generating sources.

Response to Arguments

5. Applicant's arguments filed 28 April 2003 have been fully considered but they are not persuasive.

Applicant argues that in Behl, "no teaching is found of a component on a board". Regarding claims 1 and 34, "at least one board" is found only in the preambles of the claims. The recitation that has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained

Art Unit: 2835

description of the structure not depending for completeness upon the introductory clause. *Kropa v. Robie*, 88 USPQ 478 (CCPA 1951); and a hard disk drive is a component.

Regarding claim 6, the air is drawn from outside on the right and drawn from within the case on the left side as shown in fig. 1.

Applicant argues also that "no suggestion to combine Behl and Papa et al." Behl teaches a cooling assembly for cooling heat source, and Papa teaches a heat source in a similar structure. It would have been an obvious matter to one having ordinary skill in the art at the time the invention was made to combine the inventions for solving heat problems.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2835

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

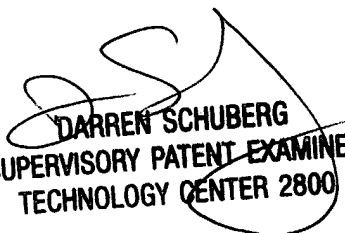
Correspondence

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yean-Hsi Chang whose telephone number is (703) 306-5798. The examiner can normally be reached on 07:30-16:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (703) 308-4815. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3431 for regular communications and for After Final communications. There are RightFAX numbers and provide the fax sender with an auto-reply fax verifying receipt by the USPTO: Before-Final (703-872-9318) and After-Final (703-872-9319).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 305-8558.

Yean-Hsi Chang
Patent Examiner
Art Unit: 2835
June 28, 2003


DARREN SCHUBERG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800